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(320) 231-7185

To: Bob Woss (CIR LNS)

From: Byron Barnsworth

Date: 8/27/86

RE: Showering Bowls

I showered bowls to remove
punge as requested. Product
(lathers) very good after smoke step.

Current smoke cycle:

10 minutes 160/160
40 minutes 180/127
then 1st smoke step

WE tested:

5 minute shower
30 minutes 180/127
then 1st smoke step

Spent 25 minutes, saw no visual
difference in product appearance.

Will test full oven and determine
yield benefit. Please advise of any
questions.

Byron 8/27/86

Confidential
Restricted Access
U-07431

8/6/96

Mesquite Bowl,

RACK #	test rack	netel	<u>cracked</u>	
			1501	(138)
2847	-	1600	91.52%	1465 (135)
0170	-	1678	91.54%	1536 (142)
2825	-	1630	91.90%	1498 (132)

1
out of
one.

$$\begin{array}{r} 1 \\ 218 \\ -65 \\ \hline 283 \end{array}$$

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U-07432

PTO-004009

- place metal radio in oven
- at around 5 minutes
skip 160/160
- 180/27 for 20 minutes

↓
next cycle shower 5 min
 180/27 20 min
 until dry

→ radio

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Restricted Access
U-07433

PTO-004010

UNITHERM Food Systems, Inc.

Cooking Trial Data

Date : 9/12/96

Buffalo Chicken Wing

Test #	Belt Speed	Cook Time	Product:	Temperatures C.			Start Weight	Cooked Weight	Yield	Internal Temp. F.	Remark
				Zone 1	Zone 2						
#1	Slow	298		180	180		3.09	68.5%	140-155°	Buffalo	Not Fully Cooked
#2	Slow	248		180	180		4.21	73.0%	150-170°F	Savory	Color similar to finished product from Convection
#3										Barbecue	
#4											
#5											
#6											

NOTES

- #1 RPH 640 F: 22.80 H: 1:13 T: 1:18A M: 35% Steam: Off
Dwell Time: 10 min 30 sec
- #2 Same as #1 Dwell Time: 10 min 30 sec Too much color development
- #3
- #4
- #5
- #6

U-03914

PTO-004011

UNITHERM Food Systems, Inc.

Cooking Trial Data

Date :

Test #	Belt Speed	Cook Time	Product:			Yield	Internal Temp. F.	Remarks
			Zone 1	Zone 2	Start Cooked Weight			
#1	23.05 Hz 1 min 250v			8.64	8.33		108°F	Dipped 12 times 680°F fast
#2				8.61	8.37			
#3				8.61	8.40 8.33			
#4				8.71	8.59		113°F	2 bands support not reflected fast
#5				8.62	8.33			
#6					8.35			
NOTES				8.63	8.42			
#1				8.40				
#2				8.64	8.44			
#3					8.42			
#4					8.40			
#5								

U-03915

PTO-004012

UNITHERM Food Systems, Inc.

Cooking Trial Data

Date:

Trial #	Belt Speed	Cook Time	Temperatures C.	Start Weight	Cooked Weight	Yield	Supplied By:	
							Internal Temp. F.	
							Remarks	
			Zone 1 Zone 2					
#1				5.82	5.73	98.5	56° F over 46° F zone	160° F 52° F
#2				5.69	5.62	98.9		170° I
#3				5.42	5.37	99.08	2.T.O.I	
#4								
#5								
#6								
NOTES								
#1								
#2								
#3								
#4								
#5								
#6								

U-03916

PTO-004013

UNITHERM Food Systems, Inc.

Cooking Trial Data

Product: SS144

Date:

Supplied By:

Test #	Belt Speed	Cook Time	Temperatures C.	Start Weight	Cooked Weight	Yield	Internal Temp. F.	Remarks
			Zone 1 Zone 2					
#1	450 S 5 min 0 sec	11 min		8.64	8.53	98.5	101 F	light color
#2	23.01 H2	11 min		8.64	8.41	97.11	135°F	Dart Redish Color Int. 101°
#3	347"	23.05	108°F	8.63	8.45	97.9	Starting Internal 46°F 49°F Int 101°F Ext	
#4	350°F			8.65	8.40	97.11	Start Int 46°F End Surface 59°F End Surface 48°F Ext 490°F Int 50° End 49°F End	
#5	350°			8.62	8.35	97.10	106°F SURF 46°F INT 46°	
#6				8.61	8.30	97.10		

NOTES

#1

#2

#3 147: RPM T: 17A M: 33°F 23.05 H2

#4

#5

#6

U-03917

Did you have these results for Wabtec foods.

U-8217

CONFIDENTIAL ATTORNEY ONLY

PTO-004015

UNITHERM Food Systems, Inc.**Cooking Trial Data**

Product: 74 Queen Roast

Supplied By: Anderson

Test #	Belt Speed	Cook Time	Temperatures C.	Start Weight	Cooked Weight	Yield	Internal Temp. F.	Remark
		Zone 1	Zone 2					
#1	15.60 Hz	350°		7.81	7.34	93.98	42 EXT 44 ZWT	76°F surface chilled
#2				8.14	7.67	94.22	167 EXT 44 ZWT	
#3				8.32	7.91	95.07		
#4				8.97	7.56	94.84		
#5				8.34	7.87	94.14		
#6				8.47	8.06	95.16		
NOTES								
#1				8.20	7.80	95.12		
#2				8.12	7.71	95.11		
#3								
#4								
#5								
#6								

U-8218

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PTO-004016

UNITHERM Food Systems, Inc.
Cooking Trial Data

Cooking Trial Data							Date:
Test #	Belt Speed	Cook Time	Product: 500g 16 Minibar	Start Temperature C.	Cooked Weight	Yield	Supplied By:
			Zone 1	Zone 2			Internal Temp. F.
#1	21.57 Hz	350°		19.3	7.58	95.59	Chilled 42°F Int 43°F Ext
#2				8.16	7.83	96.69	
#3				8.19	7.93	96.83	116°F Surface 50°F Int
#4				8.17	7.94	97.18	
#5				8.03	7.68	95.64	
#6				8.42	8.14	96.67	
NOTES							
#1				7.94	7.64	96.22	
#2				8.13	7.88	96.92	
#3							
#4							
#5							
#6							

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U-8219

PTO-004017

UNITHERM Food Systems, Inc.

Cooking Trial Data

Date:

Test #	Belt Speed	Cook Time	Product:	1/4				Supplied By:	Internal Temp. F.	Remark
				Zone 1	Zone 2	Start Weight	Cooked Weight			
#1				350° 25.0 ftz		9.92	9.08	96.3		Super Poly
#2	147 ftz 350°				9.31	8.97	96.3			043 Smoke
#3					9.27	8.90	96.5		42° F Int	52° F Ext
#4					9.02	8.77	97.2		108° Surface	15 min assess 94° F Int
#5					9.50	9.31	96.9			
#6					9.54	9.25	97.0		123° Ext	of pack
NOTES										
#1						9.32	9.14	97.1		
#2						9.46	9.0	95.6		
#3						9.47	9.20	97.1		
#4						9.24	9.02	97.8		
#5						9.34	9.20	97.0		
#6						9.31	9.03	97.0		
						8.99	8.73	97.10		
						9.33	9.10	97.50		

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U-8220

PTO-004018

UNITHERM Food Systems, Inc.				Cooking Trial Data				Product: 200N + 200W				Supplier: SMOKE WHITE 51002				Date: 9/13/96			
Test #	Belt Speed	Cook Time	Temperatures C.	Zone 1	Zone 2	Start Weight	Cooked Weight	Yield	Internal Temp. F.	Remarks									
#1	1 min	350°		5.91	5.83	5.83	6.19	98.65	480F Surface & Internal 164°F Cut										
#2				6.21	6.19	5.91	5.91	98.22											
				5.97	5.91	5.91	5.91	98.99											
				5.71	5.65	5.66	5.63	98.95											
				5.73	5.65	5.65	5.63	98.60											
				6.03	5.98	5.98	5.97	99.17											
				5.72	5.67	5.67	5.64	97.13											
NOTES																			
#1	20% less time	23.02.112		1.9A	1.9A	M=37%													
#2				5.55	5.55	5.55	5.55	99.11											
#3				5.44	5.38	5.38	5.38	98.89											
#4				5.50	5.45	5.45	5.45	99.09											
#5				5.59	5.54	5.54	5.54	99.11											
#6				5.45	5.41	5.41	5.41	99.27											

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U-8221

PTO-004019

UNITHERM Food Systems, Inc.

Cooking Trial Data

Product: *1/4"*

Test #	Belt Speed	Cook Time	Temperatures C.	Start Weight	Cooked Weight	Yield	Internal Temp. F.	Supplied By:
			Zone 1 Zone 2					
#1			350° 23 min	9.92	9.08	96.3		Super Poly
				9.31	8.97	96.3		063 Smoke
#2			137° 42 min				42° F Int	
			350°	9.27	8.95	96.5	52° F Ext	
#3					8.74			
#4				9.02	8.77	97.2		108° Surface 15 min. assy
					9.18			44° F Int
#5				9.50	9.31	94.9		
#6					9.25	9.23		63° Ext off pick

NOTES

#1 9.32 9.14 9.11 9.8.1

#2 9.41 9.0 8.99 9.5.6

#3 9.47 9.20 9.11 97.1

#4 9.34 9.0 8.97 97.8

#5

9.05 9.0 9.80 97.0

#6

9.31 9.03 8.98 97.0
8.99 8.73 8.70 97.10
9.08 9.07 97.10

Date: _____

U-03919

PTO-004020

UNITHERM FOOD SYSTEMS INCORPORATED
1108 WEST HARTFORD
PONCA CITY, OKLAHOMA 74601
TELEPHONE: 405-762-0197
FAX: 405-762-0199



A WORLD OF STAINLESS STEEL PRODUCTS

FAXED
09-26-96

September 26, 1996

Dick Taylor
PLANTATION FOODS
3130 Gholson Road
Waco, TX 76702-0788

Via Fax # 817-799-5229

RE: Quote # 354DH

Dear Dick:

It was a pleasure to meet with you yesterday. The following is a list of equipment required for the browning line.

Browning Line

2-Zone RapidFlow (5,000 lbs per hour)	\$ 250,000
Liquid Smoke Dip	\$ 25,000
Bag Stripper / Casing Removal (12 units per minute)	\$ 20,000
Purge Removal and Air Knife	\$ 15,800
Rotary Table for discharge into single file	\$ 14,000

These are the primary pieces for this line.

Fry Line

Bag Stripper	\$ 25,000
Purge Removal and Air Knife (2 piece feed)	\$ 15,800

Delivery

10 - 12 weeks	
Budget cost	\$ 1,600

Ancillary Conveyors

Budget Price	\$ 28,000
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A DIVISION OF UNITHERM FOOD SYSTEMS INCORPORATED

U-04846

p.2

680-762-0199

UNITSHEAR

820:60 00 60 300

PTO-004021

September 26, 1996

All pricing is F.O.B. Ponca City, Oklahoma.

As discussed, ownership of the process would remain with UNITHERM until PLANTATION FOODS accepts the handover documents.

Upon ordering the equipment specified in the Browning Line and Fry Line, we would commit Chris Foster to site for 2 - 4 days to agree the product flow. In short, he would lay out the line and look for your endorsement. It would be clear from this layout if any ancillary conveyors would be required.

Full engineering drawings will be supplied for approval.

The line would be run and tested at Ponca City prior to delivery. We would expect PLANTATION FOODS to provide product for test purposes, and to visit site prior to shipping. Commissioning trials conducted here prior to delivery will reduce commissioning costs.

About the Equipment

Casing Removal

Turkey breasts are manually removed from the trolley and placed on the stripping conveyor. Filtered, compressed air is injected to separate the casing from the product. The breast is then conveyed through a slitter, where a series of parallel opposing knives slit the casing. The knives are depth-controlled to prevent scoring of the meat, and individually follow the contour of the breast to provide uniform slitting of the casing. The product is then conveyed to a casing removal station where the separated and slit casing is manually removed from the breast.

Auto Purge Removal and Drying Chamber

The breasts, with casings removed, are conveyed through a purge removal chamber that steams the product at a preset temperature and dwell time. Temperature and dwell times are adjustable. At the end of purge removal, the breasts are transferred through an air knife to remove excess moisture. The temperature is thermostatically controlled.

Smoke / Liquid Applicator

This would be designed to re-circulate the liquid in a partial dip tank. There would be an automatic self-leveling infeed from a header tank to assure a minimum of by-product. The process would filter out particulate.

U-04847

P-3

680-760-0198

unitherm

#20:60 00 60 300

PTO-004022

RapidFlow / Process Parameters

Product: Turkey / Chicken Crowns
Initial Temperature: 40°C
Cook / Brown Temperature: 300°C
Residence Time: 7½ to 10 minutes
Steam Injection: 2 Bar (not required for browning)

Anticipated Throughputs based on following data:

Crown Size / Foot Print: 8" x 12"
Initial Weight: 10 lb.
Finished Weight: 98 - 99 percent
Throughput (Raw): 4800 lb. (10 minute dwell time)

UNITHERM RAPIDFLOW II CONTINUOUS CONVECTION OVEN RF2

Belt Height: 40"
Belt Width: 40"
Belt Type: Flat flex wire belt
Overall Length: 20'
Cooking Length: 17'
Drive Motors: 1 off, SEW geared motor. IP 55 (1.3kW)
Belt Speed: 2 minute minimum; 4 hour maximum
Circulation Fans: 6 off, stainless steel impeller (6 x 0.75 kW)
Balanced by UNITHERM to provide even heat across entire belt width.
Steam Injection System: Into cooking chamber. Nominally 80 kgs per hour maximum at 2 bar dry saturated. (Independently controllable.)
Extraction Fan: 2 off, Bifurcated 2000 cfm variable (0.75kW). Stainless steel construction.

U-04848

P-4

680-762-0199

Unichem

80:60 00 80 200

PTO-004023

Belt Washer (Continuous): High pressure (25 bar) pump. Adjustable weir plate within washer to regulate water usage / effluent discharge. Pump close-coupled to 15 kW drive motor.

Heating System: Comprised of 48 x 2 kW finned incalloy elements per zone. Elements designed to maximize efficient heat transfer (192 kW total heating load).

Elements controlled via electronic thyristor drive to maximize energy efficiency. To maximize start-up time, full energy usage allows the oven to reach maximum temperature (350°C) within 15 minutes from cold.

PID temperature controllers within each zone allow accurate set point control of +/- 1°C.

Fire Protection Systems: Operated by a solid-state, approved fire detector. Twin systems, steam at nominally 6 bar to flood the lower chamber and cooking area. Mains water into the oven top canopy. Pressure switches ensure pressure available to allow machine to operate.

General Construction: All AISI 304 stainless steel. Main framework constructed from 40 x 40 RHS. Inner chamber allowed to "Free Float" for expansion purposes. Height adjustable, self-leveling feet fitted. Outer canopies hinged to allow cleaning. During hygiene, all belt support rods are easily removed and refitted.

Fat collection tray in lower cooker chamber with 3"-diameter outfeed pipe to drain / collection system. Baffle plates on circulation fans are removable for hygiene. All pipework has de-mountable fitting to allow hygiene.

Control Panel: Stainless steel IP 65, clear macrolon cover over door furniture and controllers. Visual display of temperature in each zone. Visual display of belt speed (frequency). General control gear telemecanique.

All Up Power Requirements:

Heating System:	192 kW
Circulation Fans:	4.5 kW
Extraction Fans:	3 kW

U-04849

September 26, 1996

Belt Washer:	15 kW
Controls, etc.	2 kW
Drive Motors:	2 kW
Total:	218.5 kW

Running Costs

During start-up (15 minutes), 100 percent power is required during normal operation; the thyristor drive modulates the load to nominally 30 percent of the P.L.C.; this equates to 70 kW. Given an industrial cost per kWh of 77 cents, this gives a running cost of nominally \$4.90 per hour.

Costs of maintenance are minimal. A weekly check of all components will take one hour, due to the "Maintenance Friendly" design of the machine.

Commercial Notes

Installation includes the following:

- Mechanical erection and leveling
- Electrical interconnection using stainless steel and flexible conduit
- Functional testing of all systems
- Fire suppression system testing

Exclusions

- Civil engineering work
- Ducting from top of extract fans through roof space
- Service connections (mains, incomm, steam, water, drains)

Commissioning

Commissioning will commence upon completion of installation.
Commissioning is charged at \$50 per hour for all hours worked, including traveling.
Out-of-pocket expenses and hotels will be charged at cost, or if preferred, settled directly by the client.
Signed timesheets to be submitted for approval; these form the basis of invoices.

Documentation

Machine will be supplied with one full instruction manual including electrical drawings.

U-04850

9 · p

580-762-0199

unithere

*30:60 00 60 30

PTO-004025

Dick Taylor

Pag 6

September 26, 1996

Spares

A comprehensive spares listing with recommended stock holding will be supplied after order placement.

Payment Terms on All Items

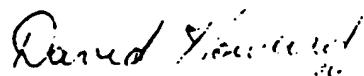
- 30% Deposit with purchase order
- 60% Prior to shipment
- 10% Due within 30 days of delivery

Terms and Conditions of Sale

This contract is subject to UNITHERM standard terms and conditions of sale printed on the reverse of this quotation's cover sheet.

I trust this quotation will meet with your approval; I look forward to speaking with you soon.

Regards,



David Howard
President

U-04851

L.P.

580-762-0199

UNITHERM

800:60 00 60 300

PTO-004026

SERVICE REQUIREMENTS

ELECTRICAL:-

480V 3 PHASE, NEUTRAL & EARTH
CABLES TO BE CAPABLE OF CARRYING
450 AMPS PER PHASE MINIMUM.

WATER FOR FIRE SYSTEM:-

$3/4"$ N.P.T MAX FLOW AT
3 BAR MINIMUM (45 P.S.I.)

WATER FOR BELT WASH:-

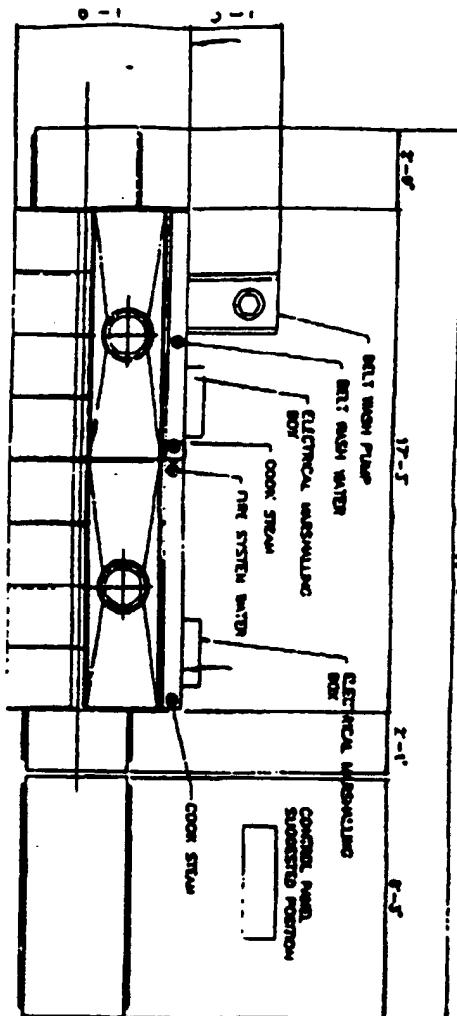
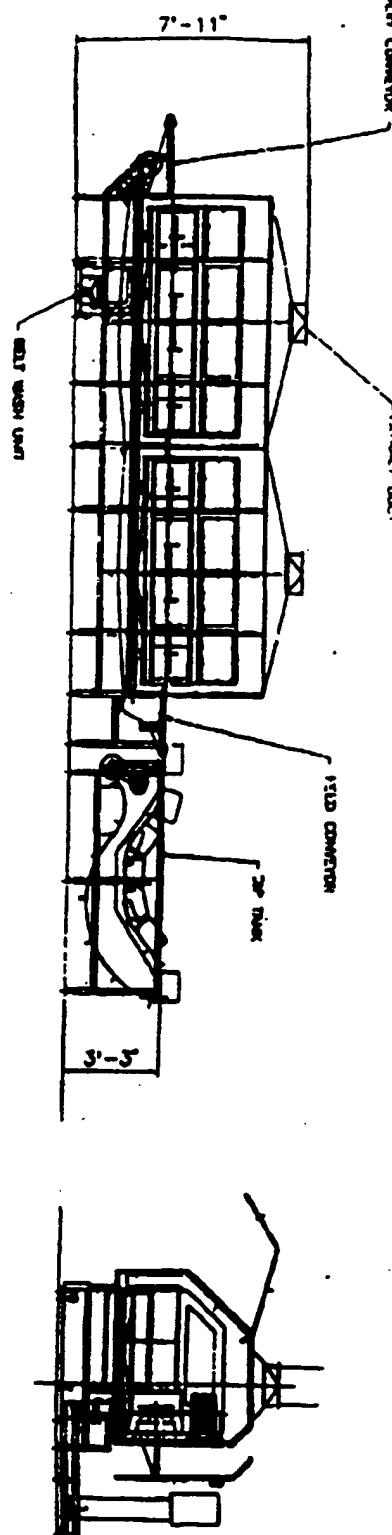
$1/2"$ N.P.T AT 3 BAR (45 P.S.I.)
90 GALS TO FILL

STEAM FOR COOKING:-

110 KG / HOUR AT
3 BAR (45 P.S.I.)
2 POSITIONS

DUCTING FROM EXTRACT FANS -

13.75 V.D.
FLANGE CONNECTION
O/D 19.5" I/D 15.75" 8 HOLES
 $1/2"$ DIA. ON A $1/4$ " P.C.D



U-04852

UNITHERM FOOD SYSTEMS INCORPORATED
1108 WEST HARTFORD
PONCA CITY, OKLAHOMA 74601
TELEPHONE: 405-762-0197
FAX: 405-762-0199



A WORLD OF STAINLESS STEEL PRODUCTS

October 09, 1996

Mr. Jeff Dierenfeld
JENNIE-O FOODS
1126 West Benson Ave.
Willmar, MN 56201

Dear Jeff:

We ran the Liquid Smoke test as follows:

Two pieces with 50 / 50 solution of Charcoal Select

One piece with 100 percent Charcoal Select

The oven temperature was 250°; dwell time of 20 minutes.

We noticed after the third test that there is a relationship between the tightness of the netting and the amount of marking. We also noticed that if the netting is too tight it tears the skin when the netting is removed.

I do believe that we could match your product with adequate testing

I would like to run a test at 10 minutes at 320° with a 50 / 50 solution. I believe this would yield a darker product than the tests run so far

I hope you agree that the process is worth your visiting and conducting testing for yourselves.

Regards,

David Howard
President

U-02281

PTO-004028

UNITHERM FOOD SYSTEMS INCORPORATED
1106 WEST HARTFORD
PONCA CITY, OKLAHOMA 74601
TELEPHONE: 405-762-0197
FAX: 405-762-0199



A WORLD OF STAINLESS STEEL PRODUCTS

November 05, 1996

Tim McConnell
FOSTER FARMS
520 "C" St.
Turlock, CA 95380

Via Fax # 209-394-6463

Dear Tim:

It is important to read all of the notes when looking at the product. You will notice subtle changes in the process.

SMOKED PRODUCTS

Product No. 1

This was dipped in liquid smoke for 60 sec.
Solution was Charcoal Select, 70 Smoke / 30 Water
Oven Temp.: 265° C.
Dwell Time: 10 minutes
Cook Yield: 98½ percent

No. 2

This was dipped in liquid smoke for 60 sec.
Solution was Charcoal Select, 50 Smoke / 50 Water
Oven Temp.: 265° C.
Dwell Time: 10 minutes
Cook Yield: 98 percent

No. 3

The same as No. 2

FF 00363

No. 5

This was dipped in 30 percent Smoke / 70 percent Water
Oven Temp.: 265° C.
Dwell Time: 10 minutes
Cook Yield: 98½ percent

No. 10

This product was dipped for 30 seconds in a 30 percent Smoke concentration.
Oven Temp.: 280° C.
Dwell Time: 10 minutes
Cook Yield: 98½ percent

Fans were reversed to drive heat through the belt.

ROASTED PRODUCTSNo. 11

The dwell time for this product was increased to 20 minutes and the fans reversed to drive the energy through the belt. Yield was 93 percent.

The variables are time, temperature, and smoke concentration. The direction of the fans can deliver energy locally across the crown and through the belt. By reversing the fans on a one-zone oven, you direct more energy to the inside of the product.

I noticed that the peripheral edge of the product charred. This may be desirable or you may seek to eliminate it. This can be achieved by introducing super-heated vapor from steam. On this trial we did not use this process; however, during Gary's site visit, I will demonstrate this.

Please ring if you have any questions.

Regards,



FF 00364

David Howard
President

DM456TM

PTO-004030